Influenza Surveillance Report
Week 03: Jan 18th – Jan 24th, 2015

I. Influenza Summary to Date
Influenza surveillance for suburban Cook County involves the weekly collection of data from a sample of hospitals, private physician’s offices, and laboratory data. The risk for influenza infection is currently moderate. Our sentinel participants reported the following aggregate measures: Syndromic Surveillance: 1.86% ILI, Sentinel Surveillance: 3.43% ILI. Forty-one (12.9%) specimens tested positive for influenza (9 influenza A H3N2, 23 influenza A unknown subtype [subtyping not performed], and 9 influenza B). Since Week 35 (8/24/2014), suburban Cook County has had 268 cases of influenza-associated intensive care unit (ICU) hospitalizations, 35 clusters of ILI in schools, and 40 outbreaks of influenza in long term care (LTC) facilities. During week 03, 3 ICU hospitalizations due to influenza infection were reported to CCDPH. The percentage of deaths due to pneumonia and influenza was 9.01% for the previous week which was above the threshold of 7.32%. Thank you to all of our surveillance partners for their help in collecting this information.

II. Syndromic Surveillance Data

III. Syndromic Surveillance by Age Group Data

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IV. Sentinel Provider Data

- Baseline
- 2011 - 2012
- 2012 - 2013
- 2013 - 2014
- 2014 - 2015

% of Visits for ILI

Week Number

V. Laboratory Surveillance Data

- A (unknown subtype)
- A H3N2
- A H1N1
- B

% Positive Specimens

Week Number

VI. ICU Hospitalization Data

<table>
<thead>
<tr>
<th>Hospitalized Case Counts</th>
<th>#</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Cases</td>
<td>268</td>
</tr>
<tr>
<td>Incidence by Age</td>
<td>#</td>
</tr>
<tr>
<td>0-4</td>
<td>5</td>
</tr>
<tr>
<td>5-24</td>
<td>17</td>
</tr>
<tr>
<td>25-49</td>
<td>16</td>
</tr>
<tr>
<td>50-64</td>
<td>52</td>
</tr>
<tr>
<td>65+</td>
<td>178</td>
</tr>
<tr>
<td>Incidence by Region</td>
<td>#</td>
</tr>
<tr>
<td>North</td>
<td>119</td>
</tr>
<tr>
<td>West</td>
<td>42</td>
</tr>
<tr>
<td>Southwest</td>
<td>38</td>
</tr>
<tr>
<td>South</td>
<td>69</td>
</tr>
</tbody>
</table>

No. of ICU Hospitalizations

Week Number
VII. Pneumonia and Influenza Mortality Data

VIII. Regional Data

IX. United States Data

(All data are preliminary and may change as more reports are received.)
1. Syndromic surveillance influenza-like-illness (ILI) syndrome is defined as a symptom complex of fever and cough or sore throat from ESSENCE. 45 hospital EDs participate in ESSENCE. ILI = # of ED visits for ILI / total # of ED visits.

2. ILI is defined as fever ≥ 100°F, cough and/or sore throat in the absence of a known cause other than influenza. 8 hospital EDs and 3 physician offices are participating CDC sentinel sites.

3. Laboratory surveillance includes viral culture, RT-PCR, and the rapid antigen test. Not all cases are suburban Cook County Residents. Participating laboratories: IDPH, NSUHS, and ACL.

4. Hospitalization data are only for suburban Cook County residents (excludes Evanston, Skokie, Oak Park, and Stickney). Data includes reported cases for the presented week.

5. Pneumonia and Influenza (P&I) deaths include all deaths where the immediate cause of death or a contributing factor was pneumonia and/or influenza (aspiration pneumonia is excluded.) Data includes all of Cook County. The percentage of deaths due to P&I are compared with a seasonal baseline and epidemic threshold value calculated for each week. The seasonal baseline of P&I deaths is calculated using a periodic regression model that incorporates a CDC based robust regression procedure applied to data from the previous four years. An increase of 1.645 standard deviations above the seasonal baseline of P&I deaths is considered the “epidemic threshold,” i.e., the point at which the observed proportion of deaths attributed to pneumonia or influenza was significantly higher than would be expected at that time of the year in the absence of substantial influenza-related mortality. http://www.cdc.gov/flu/weekly/overview.htm#Mortality


† This map uses the proportion of outpatient visits to health care providers for influenza-like illness to measure the ILI activity level within a state.